

SHUBIN, S.

Fire brigade dispatcher's desk. Posh.delo 3 no.1:15 Ja '57.
(MIRA 10:4)

(Kuybyshev--Fire departments)

SHUBIN, Stepan Fedorovich, inzh.; GLAGOLEV, L.S., inzh., red.;
NINEMYAGI, D.K., red.izd-va; GUSEVA, S.S., tekhn.red.

[Heating and ventilating livestock barns] Teplosnabzhenie
i ventilatsiia zhivotnovodcheskikh pomeshchenii. Moskva,
Gos.izd-vo lit-ry po stroit. i arkhitekt., 1957. 122 p.
(MIRA 12:5)

(Barns--Heating and ventilating)

SH/BIN, S. (Kotel'nikovo, Stalingradskaya oblast')

"Veselyy", the new collective farm settlement. Sel'. stroi. 12 no.2:
29 7 '58. (MIRA 11:2)

(Kotel'nikovo District--Farm buildings)

ZONTOV, Ye.; BORISENKOV, M.; NIKIFOROV, P.; SHUBIN, S.

For the further consolidation of collective farm finance.

Den: 1 kred. 18 no.11:52-60 N'60.

(MIRA 13:11)

1. Upravlyayushchiy Permskoy kontoroy Gosbanka (for Borisenkov).
2. Predsedatel' kolkhoza "Pamyat' Il'icha" Sarayevskogo rayona Ryazanskoy oblasti (for Nikiforov).
3. Bukhgalter kolkhoza "Pamyat' Il'icha" Sarayevskogo rayona Ryazanskoy oblasti (for Shubin).

(Collective farms--Finance)

SHUBIN, S.F.

Heating and ventilation of service buildings on farms.
Vod. i san. tekhn. no.6:24-27 Je '61 (MIRA 14:6)
(Farm buildings--Heating and ventilation)

SHUBIN, S.G., kand. tekhn. nauk

Analytical method of determining the operational oil temperature
in the lubrication layer of diesel engine cylinders. Trudy Khab.

IIT no.10:50-55 '59.

(MIRA 12:7)

(Diesel engines--Lubrication)

DEMOCHKO, Ivan Ivanovich; SHUBIN, Sergey Sergeyevich; LYUBIMOV, N.G.,
otv.red.; CHANTSEVA, G.M., tekhn.red.

[SBL-4-2 scraper winch] Skrepernaya lebedka SBL-4-2. Moskva,
Ugletekhizdat, 1959. 30 p. (MIRA 12:12)
(Coal mining machinery)

ABRAMOV, B.; SHUBIN, V.

Peas in northern Gorkiy Province. Zemledelie 24 no.1:45-46 Ja
'62. (MIRA 15:2)

1. Predsedatel' opytно-pokazatel'nogo kolkhoza "Traktor", Urenskogo
rayona (for Abramov). 2. Glavnyy agronom kolkhoza "Traktor",
Urenskogo rayona (for Shubin).
(Gorkiy Province--Peas)

MUSTYATSA, V., inzh.; SHUBIN, V., inzh.

Automatic measuring out of liquid gas in the filling of tanks. Zhil.
-kom. khoz. 12 no. 10:28-29 Ja '62. (MIRA 16:2)

(Liquified petroleum gas)

POLYAK, S., ekonomist; SHUBIN, V., inzh.

Some problems of business accounting and planning in the fleet
of passenger ships. Rech. transp. 24 no.3:18-19 '65.
(MIRA 18:5)

SHUBIN, V.A. (Buy); KONOVALOV, V.M. (Karasuk); PRACHKO, P.Ye. (Simferopol')

More rights for railroad divisions. Zhel.dor.transp. 45no.7:60-64
Jl '63. (MIRA 16:9)

1. Nachal'nik finansovogo otдела Buyskogo otdeleniya Severnoy dorogi
(for Shubin). 2. Nachal'nik planovo-tekhniko-ekonomicheskogo otдела
Karasukskogo otdeleniya Zapadno-Sibirskoy dorogi (for Konovalov). 3.
Nachal'nik planovo-tekhniko-ekonomicheskogo otдела Krymskogo otdeleni-
ya Pridneprovskoy dorogi (for Prachko).
(Railroads--Management)

COMMON ELEMENTS										COMMON VARIABLES									
1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									
<p>Electrolytic Determination of Small Amounts of Lead in Copper and Copper-Zinc Alloys. V. Shubin (<i>Zvezdskaya Laboratoriya (Works' Lab.)</i>, 1938, (2), 28-37; <i>Chem. Zhurn.</i>, 1934, 188, 11, 2716; <i>O. Abs.</i>, 1935, 80, 7217).—[In Russian.] The most favourable conditions for the determination of slight amounts of Pb in Cu and Cu-Zn alloys electrolytically are: (1) slight acidity, i.e. 3-5 c.c. HNO₃ (d 1.40) to 150-250 c.c. of electrolyte; (2) Cu concentration should not exceed 10-12 gm. in 150 c.c.; (3) electrolyte temperature 20°-50° C.; (4) current density at the gauze electrode 1-2-1.5 amp.; and (5) vigorous stirring of the electrolyte. In these conditions slight amounts of Pb (0.05%) can be determined with an accuracy of 0.003%.—S. G.</p>																			
<p>ASM-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																			
1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									

SHUBIN, V.A., Cand Tech Sci -- (diss) "Study of the
reduction of titanium ^{tetra-}chloride with ^{sodium} nitrate." Mos,
1958, 8 pp (Min of Higher Education USSR. Mos Inst of
Non-Ferrous Metals and Gold in M.I. Kalinin. Chair
of "Metallurgy of Light Metals") 150 copies (KL, 50-58, 126)

SOV/149-58-5-11/18

AUTHORS: Shubin, V.A. and Razukhin, V.A.

TITLE: The Effect of Physical Conditions During the Sodium-thermal Reduction of Titanium Chlorides on the Particle Size of Titanium (Zavisimost' krupnosti zeren titana ot fizicheskikh usloviy pri natriyetermicheskom vosstanovlenii yego khloridov)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya Metallurgiya, 1958, Nr 5, pp 98 - 106 + 4 plates (USSR)

ABSTRACT: It was shown by the authors in their earlier work that in the 200 to 700 °C temperature interval, reduction of $TiCl_4$ by sodium involves formation of sub-chlorides of Ti, the reaction proceeding according to :
 $TiCl_4 \rightarrow TiCl_3 \rightarrow TiCl_2 \rightarrow TiCl \rightarrow Ti$. In the present work the effect of temperature, pressure of argon, excess of sodium and stirring of the reacting substances on the particle size of the produced titanium and on the specific surface area of Ti particles was studied. The results of the preliminary experiments showed that if the walls of the reaction vessel were maintained at a constant temperature, it was possible to maintain the

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interior of the reaction chamber at a constant temperature by admitting TiCl_4 at a slow and uniform rate. In the first series of experiments 40 g Na was placed in a 200 ml capacity crucible and 40 g TiCl_4 (corresponding to approx. 50% sodium consumption) was fed in the reaction vessel (Figure 1) at the rate of 1.33 g/min for 30 min, the pressure of A being 40 mm Hg. The variation of the particle size of titanium obtained under these conditions at various temperatures is shown in Figure 2, graphs 1 and 2. Graphs 3 and 4 in the same diagram show the variation of the specific surface area of the metal powder measured by the quantity (mg) of methyl alcohol adsorbed by 1 g of Ti powder (graphs 1 and 3 - no stirring employed; graphs 2 and 4 - the reacting mass stirred). Both the size and the specific surface area of the particles increased with rising temperature. To explain the comparatively rapid increase in the particle size at 700 °C, a longitudinal section

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of the contents of the crucible (Figure 3), quenched at the moment when the supply of $TiCl_4$ was cut off, was examined. The top of the solidified mass, which had been obtained without stirring, was covered with small, reddish-violet, loosely adhering $TiCl_3$ crystals which could be easily removed by brushing and by application of a jet of compressed nitrogen. However, the surface cleaned in this manner was not smooth, showing protrusions of thread-like Ti agglomerates (detail 1, Figure 3) which extended throughout the reacting mass (detail 2). The Ti agglomerates, extracted from the reacting mass by careful leaching, are shown in a microphotograph reproduced in Figure 4. Under the reacting mass characterised by a dark grey colour indicating the presence of Ti and $TiCl_2$, a cavity (detail 3, Figure 3) was formed. The lower part of the crucible was filled with sodium (detail 5) connected with the reacting mass by a meniscus. In the centre of the crucible, the reacting mass and the sodium layer were joined by a stalactite-like mass of fused mixture of

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chlorides of sodium and titanium (detail 4). Comparison of the sections of the crucible contents quenched from various temperatures showed that the reacting mass, which constitutes a comparatively loose mixture at lower temperatures, at 600 and, particularly at 700 °C, becomes a compact mass, obviously as a result of the formation of a low melting-point mixture of NaCl and sub-chlorides of titanium. The inhibiting action of NaCl on the growth of Ti particles and their agglomerates was studied in the following manner. With the reaction chamber temperature maintained at 750 °C, one end of a closely tied bundle of several iron wires was immersed in the fused sodium which was drawn upwards by the capillary forces to come in contact with $TiCl_4$. The fused mixture of NaCl formed during the reaction flowed downwards coming in contact with Na. As the lower chlorides of Ti reacted with Na, the melting point of the chloride mixture increased until the moment was reached when it solidified. As a result, the

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Ti sponge was obtained in the form of comparatively large clusters separated from each other and adhering strongly to the iron wires. One such test piece (natural size) with sodium and the fused salts leached away is shown in Figure 5 and the following interpretation of the results of this experiment is given. Once a nucleus of metallic Ti has been formed, the reducing reaction takes place in its immediate vicinity and the flow of fused chlorides does not prevent the growth of Ti agglomerates. However, as the NaCl concentration increases, this salt gradually covers the Ti agglomerate and prevents $TiCl_4$ from reaching Na-coated titanium. At this stage, the locus of the reaction is shifted upwards following the flow of sodium and it is postulated that the Ti agglomerates in the reacting mass shown in Figure 3 are formed in a similar manner. In the next stage of the investigation, all experiments were carried out at 800 °C and stirring (120 rev/min) was employed. When the effect of the pressure of argon was studied, 350 g Na was placed

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in the crucible and the equivalent quantity of TiCl_4 (720 g) was used. Figure 6 shows that both the size (graph 1) and the specific surface area (graph 2) of Ti particles increased with the increasing pressure of argon. Not only the particle size but also the size of Ti agglomerates increased with the increasing A pressure: at $P_A = 380$ mm Hg, some of the reduced Ti was present in the reacting mass in the form of pellets up to 20 mm diameter containing Ti - 80 to 85%, NaCl 10 to 13% and Na 4-7%. A microphotograph of such a pellet is shown in Figure 7. The effect of excess Na was studied under the following conditions: rate of admission of TiCl_4 - 9 g/min; duration - 80 min; pressure of argon - 380 mm Hg; stirring at 120 rev/min. As can be seen in Figure 8, both the size (graph 1) and the specific surface area of the sodium-reduced Ti particles increased when the relative amount of the reducing agent decreased. Under favourable conditions, large Ti pellets were formed which could not be easily broken and which sometimes were quite ductile. It is

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postulated that these pellets, clearly discernible in the section of the reacting mass shown in Figure 9, are formed as a result of the reducing reaction taking place preferentially on the surface of small Ti agglomerates coated with Na, which are welded together when the reacting mass is stirred. The general conclusions of the present research can be summarised as follows:

i) Ti can be obtained by sodium reaction of $TiCl_4$ in the 300 to 800 °C temperature range. It is more convenient to use lower temperatures but if no stirring is employed, a solid crust of Ti salts formed on the surface of sodium stops the reaction. If stirring is employed, better utilisation of Na is attained if reduction of $TiCl_4$ takes place at temperatures at which the produced chlorides remain solid. However, even when the loose reacting mixture is stirred with the excess Na, and when $TiCl_4$ is admitted at a slow rate, sub-chlorides of Ti are formed, their concentration increasing with falling temperature. The

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quality of the finely divided Ti obtained under these conditions deteriorates rapidly owing to oxidation;
ii) when the temperature of the reaction is maintained at 600 - 700 °C a stage is reached when, owing to the formation of a low-melting-point chloride mixture which later locally and/or temporarily solidifies, the reacting mass can no longer be stirred. In the absence of stirring the process of cementation of the reacting mass is accelerated, as a result of which the interaction between Na and $TiCl_4$ is hindered and the concentration of sub-

chlorides of Ti is increased;

iii) although NaCl melts at 800 °C, the reduction of $TiCl_4$ at this temperature is complicated by the following

factors: a) volatilisation of Na; b) the reaction taking place partly in the gaseous phase; c) distillation of the sub-chlorides of Ti; d) deposition of Ti in the upper regions of the reactor; e) formation of finely dispersed Ti in the crucible. All these effects can be

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employing faster rates of admission of $TiCl_4$.

iv) when the conditions are such that the chlorides formed during the reaction form fusible mixtures (i.e. at $800^\circ C$) the following methods of operating the reaction vessel can be employed: a) no stirring is used and Ti is obtained in the form of loose sponge impregnated with the excess Na and sodium chlorides. Most of the latter constituent together with a small amount of sub-chlorides of Ti accumulates in the lower part of the reaction vessel; b) stirring is employed and the amount of sodium used exceeds slightly the theoretically required quantity. Sodium is replenished as it is used up and the fused chloride mixture is periodically removed from the crucible without resulting in any appreciable losses of sodium. Under these conditions, Ti pellets are obtained which also should be periodically removed from the reaction vessel; c) all $TiCl_4$ is reduced in the upper part of the crucible,

where a block of Ti sponge is formed. Molten NaCl
Card9/10 containing a small proportion of sub-chlorides of Ti is

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drained away and collects at the bottom of the crucible.

There are 9 figures and 5 Soviet references.

ASSOCIATION: Moskovskiy institut tsvetnykh metallov i zolota.
Kafedra metallurgii legkikh metallov
(Moscow Institute of Non-ferrous Metals and Gold.
Chair of Metallurgy of Light Metals)

SUBMITTED: February 4, 1958

Card 10/10

SOV/136-58-12-10/22

AUTHORS: Shubin, V.A. and Pazukhin, V.A.

TITLE: Formation of Primary Salt Melts and Titanium Incrustations in the Reduction of $TiCl_4$ with Sodium (Ob obrazovanii pervichnykh solevykh rasplavov i titanovykh nastyley pri vosstanovlenii $TiCl$ natriyem)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 12, pp 44-50 (USSR)

ABSTRACT: The study of the primary chloride melts formed in the reduction of titanium tetrachloride by sodium is important for elucidating the nature of the formation of the individual grains of the titanium incrustations. The authors describe their study of the reduction on an incrustation whose growth was not restricted by crucible walls and of the composition of the salt melts formed thereby. A steel reactor 150 mm in diameter and 550 mm high (Figure 1) was used to which sodium (and in some experiments magnesium) could be admitted through a copper gauze in an argon atmosphere and flow through porous titanium to react with $TiCl_4$. The reactor had an upper and a lower heater, independent of each other, thermocouples and an observation window. The salts formed dripped continuously into a crucible at a temperature low enough to prevent decomposition and were later analysed. The deposits formed on

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Formation of Primary Salt Melts and Titanium Incrustations in the
Reduction of TiCl_4 with Sodium

the reaction surface were stripped at the end of a run and examined. TiCl_4 reduction tests were carried out at $750 \pm 20^\circ\text{C}$ (Table 1 shows results obtained with 100 g of sodium and with TiCl_4 feed rates of 1.15-7 g/min) and at $800 \pm 20^\circ\text{C}$ (Table 2 shows results for 40 g sodium and 3.75-7.5 g/min TiCl_4). The titanium grain sizes in incrustations in these experiments were also determined (Table 3). Tests were also carried out under non-isothermal conditions, when local temperatures probably attained 1200°C and over. The authors conclude that the reduction of TiCl_4 on a titanium incrustation takes place through lower chlorides which are adsorbed on the titanium surface and remain there either as solid or liquid, depending on the temperature. By reduction of TiCl_4 on a porous base off which the chloride can pour an end product with little or no lower chlorides can be obtained. By reduction of TiCl_4

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Reduction of TiCl_4 with Sodium

on a porous base either with sodium or magnesium, titanium-enriched growths can be obtained in which the grain sizing of the titanium sponge is similar to that obtained by the normal magnesium-thermic method. In the reactor used, the growths could be controlled by regulating the rate of filtration of the sodium through the porous base.

There are 6 figures, 4 tables and 2 Soviet references.

ASSOCIATION: Mintsvetmetzoloto

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5.1190
5.4300

Translation from: Referativnyy zhurnal. Khimiya, 1960, Nr 2, p 117

AUTHORS: Shubin, V.A., Pazukhin, V.A.

TITLE: On Some Phenomena of Sodium-Thermal Reduction of Titanium Tetrachloride

PERIODICAL: Sb. nauchn. tr. Mosk. in-t tsvetn. met. i zolota, 1958, Nr 31, pp 162 - 173

ABSTRACT: The change of the free reaction energy ΔF has been calculated for the reactions of $TiCl_4$ with Na within the temperature range of 200 - 700°C. For the summary reaction $TiCl_4 + 4Na = 4NaCl + Ti$, $\Delta F = -221,200 + 65T$, i.e., it is higher than in the case of reduction by magnesium. For the consecutive reactions of stepwise reduction it was obtained: $TiCl_4 + Na = NaCl + TiCl_3$, $\Delta F = -92,500 + 36.8T$; $TiCl_3 + Na = NaCl + TiCl_2$, $\Delta F = -46,000 + 6.7T$; $1/2TiCl_2 + Na = NaCl + 1/2Ti$, $\Delta F = -47,500 - 2.7T$. For the interaction of the lower chlorides between themselves it was obtained: $1/2TiCl_2 + 1/2TiCl_4 \rightleftharpoons TiCl_3$, $\Delta F = -32,800 + 15.5T$; $1/2Ti + 1/2TiCl_4 \rightleftharpoons TiCl_2$, $\Delta F = -14,000 + 13.4T$. The reduction of $TiCl_4$ by Na metal was studied experimentally in a reactor of Mo-glass. It has been shown that with a temperature rise from

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GALKIN, N.P.; MAYOROV, A.A.; SHUBIN, V.A.; FOLUEKTOVA, G.B.; KRYLOV, A.S.

Composition of precipitates forming in the reaction of ammonia with
aqueous solutions of uranyl sulfate or nitrate. Zhur.neorg.khim.
6 no.10:2319-2324 0 '61. (MIRA 14:9)
(Uranyl sulfate) (Uranyl nitrate) (Ammonia)

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S/078/61/006/010/---
B121/B101

21.4100
AUTHORS: Galkin, N. P., Shubin, V. A., Krylov, A. S.
TITLE: Chemism of reduction of chemical uranium concentrates
PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 10, 1961, 2325-2328

TEXT: The authors deal with the problem of reducing uranium concentrates obtained by ion exchange (85 % U_3O_8) and containing Al and Fe impurities. They studied the reduction of ammonium and sodium uranyl sulfates with hydrogen in the presence of iron or aluminum oxides. The samples were prepared by reacting NH_4OH or $NaOH$ with UO_2SO_4 at a pH of 7-8 and a temperature of 80°C, and by adding the relevant Al or Fe cation. The decomposition of ammonium uranyl sulfate in a hydrogen atmosphere at 350°C obeys the equation: $(NH_4)_2(UO_2)_2SO_4(OH)_4 \rightarrow UO_2SO_4 + UO_3 + 2NH_3 + 3H_2O$. At 550°C, the UO_3 formed continues to decompose according to the equation: $3UO_3 \rightarrow U_3O_8 + 1/2 O_2$. UO_2 is formed from UO_3 , U_3O_8 , and uranyl sulfate by reduction with hydrogen: $UO_3 + H_2 \rightarrow UO_2 + H_2O$; $U_3O_8 + 2H_2 \rightarrow 3UO_2 + 2H_2O$; $UO_2SO_4 + H_2 \rightarrow UO_2 + H_2SO_4$.

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$\text{UO}_2\text{SO}_4 + 5\text{H}_2 \rightarrow \text{UO}_2 + \text{H}_2\text{S} + 4\text{H}_2\text{O}$. The decomposition of sodium uranyl sulfate in a hydrogen atmosphere takes place according to the following equations:
 $\text{Na}_2(\text{UO}_2)_2\text{SO}_4(\text{OH})_4 \rightarrow \text{UO}_2\text{SO}_4 + 2\text{NaOH} + \text{UO}_3 + 2\text{H}_2\text{O}$; $2\text{NaOH} + 2\text{UO}_3 \rightarrow \text{Na}_2\text{U}_2\text{O}_7 + \text{H}_2\text{O}$;
 $\text{UO}_2\text{SO}_4 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SO}_4 + \text{UO}_3 + \text{H}_2\text{O}$. The reduction of uranium (VI) from the ammonium salt takes place quantitatively, and uranium (VI) is reduced from the sodium salt in an amount of 52.6 % only. Sodium diuranate was reduced in order to study the effect of sodium on the reduction of uranium (VI) compounds. Sodium diuranate is reduced in two stages:
 $\text{Na}_2\text{U}_2\text{O}_7 + \text{H}_2 \rightarrow 2\text{NaUO}_3 + \text{H}_2\text{O}$; $2\text{NaUO}_3 + \text{H}_2 \rightarrow 2\text{UO}_2 + 2\text{NaOH}$. Moreover, reduction of the sulfates results in the formation of H_2S which forms Na_2S with NaOH . The presence of sodium and iron interferes with the reduction of uranium (VI). The reduction degree of uranium (VI) from ammonium uranyl sulfate in the presence of iron hydroxide at 550°C is 64.6 % after 1 hr. The phase composition of the reduction products in the presence of iron hydroxide was determined by x-ray analysis. UO_2 , U_3O_8 , uranyl sulfate, and iron monouranate were found in the radiogram after a

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reduction time of 15 min. At 550°C, uranium (VI) of iron-containing ammonium uranyl sulfate is almost entirely reduced by H_2 after 4 hr. UO_2 , FeS , and metallic Fe were the end products. The formation of iron sulfide interferes with the reduction of ammonium uranyl sulfate in the presence of iron hydroxide. Aluminum hydroxide does not affect the reduction; it behaves like a mechanical impurity. On reduction, the compounds studied gave the same final compounds as are obtained by reduction of chemical concentrates. There are 1 figure, 2 tables, and 3 references: 2 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: Ch. D. Harrington, A. E. Ruehle. Uranium Production Technology, New York, 1959.

SUBMITTED: September 14, 1960

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S/064/62/000/009/001/001
B106/B186

AUTHORS: Galkin, N. P., Shubin, V. A., Krylov, A. S.

TITLE: High-temperature hydrolysis of silicon tetrafluoride in the decomposition products of fluosilicic acid

PERIODICAL: Khimicheskaya promyshlennost', no. 9, 1962, 11-13

TEXT: With a view to the preparation of hydrofluoric acid from fluorine-containing waste gases of the phosphoric acid fertilizers industry, an investigation was made of the high-temperature hydrolysis of silicon tetrafluoride in the decomposition products of fluosilicic acid by way of the reaction $\text{SiF}_4 + 2 \text{H}_2\text{O} \rightleftharpoons 4 \text{HF} + \text{SiO}_2$. According to Ref. 6

(F. A. Lenfesty, T. D. Farr, J. C. Brocher, Ind. Eng. Chem., 44, no. 6, 1448 (1952)), the equilibrium constant of this reaction obeys the equation $\log K_p = 5.547 - 6383/T$. Using that equation it was established that the degree of hydrolysis of silicon tetrafluoride during the thermal decomposition of fluosilic acid of different concentrations increases with decreasing concentration of the initial fluosilicic acid and with rising reaction temperature. When 5% fluosilicic acid is decomposed, a virtually

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High-temperature hydrolysis of...

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quantitative hydrolysis of SiF_4 starts from 600°C , whereas in the case of 35% fluosilicic acid it does not occur below 1100°C . Decomposition of 50% H_2SiF_6 at $900-1000^\circ\text{C}$ gives a gas mixture containing approximately 40 mole% HF and approximately 57% H_2O . After the hydrolysis of SiF_4 the gas mixture (HF , H_2O , SiF_4) was conducted over glowing coal at temperatures exceeding 800°C , whereby the water vapor was reduced. The HF concentration in the gas phase increased from 19.2 to 27.3 mole% as the temperature of SiF_4 hydrolysis and the temperature of reduction increase from 800 to 1050°C , while the concentrations of water vapor and of silicon tetrafluoride drop from 5.4 to 0.7, and from 4.1 to 1.6%, respectively. The concentrations of hydrogen (approximately 37.5%) and CO (approximately 30%) remain virtually constant while the CO_2 content decreases from 5.1 to 2.6%. These laboratory data are close to the calculated equilibrium values. This indicates that the temperature dependence of the hydrolysis constant of silicon tetrafluoride as used here holds also for temperatures above 800°C . There are 3 figures and 3 tables. The English-language reference is: A. H. Stuewe, Chem. Eng. News, 36, no. 51, 34 (1957).

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GALKIN, N.P.; SHUBIN, V.A.; KRYLOV, A.S.

High temperature hydrolysis of silicon tetrachloride in decomposition
products of silicohydrofluoric acid. Khim.prom. no.9:635-637 S
'62. (MIRA 15:11)

(Silicon chloride) (Hydrofluoric acid) (Hydrolysis)

GALKIN, N.P.; SHUBIN, V.A.; KRYLOV, A.S.

Thermodynamic analysis of interaction between hydrofluoric
acid vapors and carbon. Khim.prom. no.10:750-753 0 '62.

(MIRA 15:12)

(Hydrofluoric acid)

(Carbon)

(Thermochemistry)

L 10603-63 BDS

ACCESSION NR: AP3000944

S/0064/63/000/003/0030/0032

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AUTHOR: Galkin, N. P.; Shubin, V. A.; Kry*lov, A. S.

TITLE: Several possible methods for the production of hydrogen fluoride

SOURCE: Khimicheskaya promyshlennost', no. 3, 1963, 30-32

TOPIC TAGS: hydrogen fluoride, HF

ABSTRACT: This is a literature survey on methods of making HF. No original work is reported.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQD: 31May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 005

OTHER: 014

ellm/df
Card 1/1

GALKIN, N. P.; SHUBIN, V. A.; KRYLOV, A. S.

Some possible methods of producing hydrogen fluoride. *Khim.*
prom. no.3:190-192 Mr '63. (MIRA 16:4)

(Hydrofluoric acid)

GALKIN, N.P.; SHUBIN, V.A.; KRYLOV, A.S.; SENATOV, A.D.

Thermodynamic analysis of the process of condensation of hydrogen fluoride from its mixture with water vapor, hydrogen, and carbon monoxide. Khim.prom. no.9:686-690 S '63. (MIRA 16:12)

GALKIN, N.P.; SHUBIN, V.A.; KRYLOV, A.S.; SENATOV, A.D.

Ammonium fluorides and the recovery of fluorine from waste
gases. Khim. prom. no.10:752-754 O '63. (MIRA 17:6)

SHUBIN, V.I., kand. veterin. nauk

Comparative diagnosis of Mycoplasma infection and vitamin A deficiency.
Veterinariia 41 no.12:36-37 D '64. (MIRA 1819)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

SHUBIN, V.A., kand. veter. nauk

Differential histological diagnosis of respiratory Mycoplasma
infection and aspergillosis in poultry. Veterinariia 42
no.8:35-38 Ag '65. (MIRA 18:11)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

SHUBIN, V. A.

SHUBIN, V. A.: "The Pathological Anatomy of the Malignant Course of Cattle Hoof-and-Mouth Disease." All-Union Inst of Experimental Veterinary Medicine, Min Agriculture USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Veterinary Science)

So: Knizhnaya Letopis', No. 19, 1956.

SHUBIN, V.A., kandidat veterinarnykh nauk.

Pathological histology in malignant anthrax in cattle. Veterinariia
34 no.8:30-32 Ag '57. (MLRA 10:9)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.
(Pustule, Malignant) (Histology, Pathological)

SKORIN, I.Ye., kand.biol. nauk; SHUBIN, V.A., kand.vet.nauk.

Foot-and-mouth disease in saigas. Veterinariia 35 no.10:49-54 O '58.
(MIRA 11:10)

1.Vsesoyuznyy institut eksperimental'noy veterinarii.
(Foot-and-mouth disease) (Saiga--Diseases and pests)

SHUBIN, V.A., kand.veterinarnykh nauk

Pathoanatomical changes in the body of suckling pigs in experimental
foot-and-mouth disease. Trudy VIEV 22:133-141 '59. (MIRA 13:10)
(Foot-and-mouth disease)

SHCHUREVSKIY, V.Ye., kand.veterin.nauk; SHUBIN, V.A., kand.veterin.nauk

Throughout the Soviet Union. Veterinariia 36 no.10:94-95
0 '59. (MIRA 13:1)

(Pathology--Congresses)

SHUBIN, V. A. and LUTSEVICH, F. F. (Caus. Vet. Sci. - (Ukr))

"Some peculiarities of malignant foot-and-mouth disease."

Veterinariya, Vol. 37, No. 6, 1960, p. 25

KOVALENKO, Ya.R.; FOMINA, A.Ya.; FEOKTISTOV, P.N. [deceased]; AKULOV,
A.V.; MITROPOL'SKIY, A.S.; SHUBIN, V.A.

Observations on the course of the chronic respiratory disease in
chickens. Veterinariia 37 no.12:34-42 D '60. (MIRA 15:4)
(Poultry--Diseases and pests) (Respiratory organs--Diseases)
(Mycoplasma gallinarum)

GALKIN, N.P.; SHUBIN, V.A.; SENATOV, A.D.; KRYLOV, A.S.

~~Thermal decomposition of waste waters containing a nitrate~~
ion. Khim. prom. no.2:87-91 F '63. (MIRA 16:7)

(Sewage---Purification) (Nitrates)

FISHELEVICH, M.; SOKOLOVA, L.M.; TROKHIN, V.K.; IVASHCHENKO, S.A.; VASIL'KOV, G.V.; BORISOVICH, Yu.F.; OVSYANOV, N.I.; AMINOV, S.A.; SUVOROV, P.S.; SHUBIN, V.A.; CHIZHOV, A.

Information and brief news. Veterinariia 41 no.3:118-126 Mr '64.
(MIRA 18:1)

SHUBIN, V.A., kand. veter. nauk

Histological diagnosis of Mycoplasma infection in poultry.
Veterinariia 41 no.6:47-51 Ja '64. (MIRA 18:6)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

FOMINA, A.Ya., kand. veterin. nauk GRUSHEVA, G.A., kand. veterin. nauk;
SHUBIN, V.S., kand. veterin. nauk

Studying the strains of Escherichia coli isolated from poultry
with Mycoplasma infection. Veterinariia 41 no.1:27-30 Ja '65.
(MIRA 18:2)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

SOKOLOV, B.N.; SHUBIN, V.A.

Concerning the possibility of finding new kimberlite bodies in
the region adjacent to the pipe "Mir." Razved. i okh. nedr 30
no.12:12-15 D '64. (MIRA 18:4)

1. Batubinskaya ekspeditsiya.

L 1955-26 WTT(1)/WTT(2)/WTT(3)/WTT(4) IJP(C) GPP
ACC NR: AP6008780 SOURCE CODE: UR/0115/66/000/001/0057/0061

AUTHOR: Orlova, M. P.; Kats, G. A.; Astrov, D. N.; Belyanskiy, L. B.;
Shibayeva, O. A.; Shubin, V. E.

ORG: none

TITLE: Alloyed germanium for low-temperature thermometry

SOURCE: Izmeritel'naya tekhnika, no. 1, 1966, 57-61

TOPIC TAGS: thermometry, germanium alloy, thermometer

ABSTRACT: The results are reported of an experimental investigation of the galvanomagnetic properties of Ge doped with various amounts of Sb; As; In; Ga; the Ge properties were studied in a range of temperatures from room to liquid helium in order to find out the best impurity and its concentration suitable for low-temperature thermometers. Most measurements were made with Sb-doped Ge

Card 1/2

UDC: 546.289.001.5:536.531

L 38557-66
ACC NR: AP6008780

whose Nd was $4.6 \times 10^{16} < Nd < 1 \times 10^{17}$ per cm^3 ; the resistivity was found to be 0.00042–0.00046 ohm·m at 20–4.2K; acceptor-impurity concentration, $Na < 0.1 Nd$. A few thermometers were made from Sb-doped Ge ($Nd = 5 \times 10^{16}$ per cm^3 , $K = 6\%$) for the 40–4.2K range; their resistivity was 0.025–0.027 ohm·m at boiling-helium temperature. The relation $\lg \rho (1/T)$ was satisfactory for these thermometers only under 7K. A relatively high value of magnetoresistance of doped Ge is noted. Orig. art. has: 4 figures, 4 formulas, and 4 tables.

SUB CODE: 20, 09 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 016

Card 2/2

HS

SHUBIN, V. F.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Shubin, V. F.	"Farming in the Mongolian Republic"	Stalingrad Agricultural Institute

SO: W-30604, 7 July 1954

SHUBIN, V. F.

Zemledelie Mongolskoi Narodnoi Respubliki /Agriculture in the Mongolian People's Republic/. Moskva, Izd. Ak. nauk SSSR, 1953. 346 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 1 April 1954.

1. SHUBIN, V.F., Prof.
2. USSR (600)
4. Gobi - Agriculture
7. Agricultural utilization of the Mongolian Gobi, Priroda 42 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.

USSR/Cultivated Plants. General Problems.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20185.

Author : V. F. Stukhin

Inst : Not given.

Title : The problem of Arranging the Correct Rotations of Crops
and Putting Virgin Soil and Waste Land into Well-Ordered
Use.
(K voprosu o postroyenii pravilnykh Sevooborotov i poryadke
ispol'zovaniya tselinnykh i zaleznykh zemel').

Orig Pub: Tr. Stalingr. s.-kh. in-ta. 1955, 6, 24-36.

Abstract: The problem of introducing rational crop rotations into
the arid rayons of the Southeast is discussed with a view
toward supplying food for livestock raising through
sowing grass in addition to winter crops, organizing the
patches to be used for the yield, as well as arranging

Card : 1/2

General Problems.

M

SHUBIN, V.F.

USSR/Engineering--Irrigation

Card 1/1 Pub. 86--19/39

Authors : Shubin, V. F., Prof.

Title : Arshan'-Zel'men' (name of a wet-weather stream)

Periodical : Priroda 44/1, 95--98, Jan 1955

Abstract : A description is given of an irrigation project in the region south of Stalingrad where, by the building of dams, canals and aqueducts, a considerable area of unproductive land has been made available for agriculture. The figures for dimensions, quantities of water, etc. are stated. Exact data are given of precipitation and other climatic features. Illustrations.

Institution : Stalingrad Agricultural Institute

Submitted :

SHUBIN, V.F.

USSR/Cultivated Plants - General Problems.

M-1

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91580

Author : Shubin, V.F.

Inst :

Title : The Fields of Rotherhamstead.

Orig Pub : Zemledeliye, 1957, No 2, 66-77.

Abstract : The system of organizing field experiments at Roterhamstead Experimental Station (in England) and the length of the experiments (the station was organized in 1835) allow an objective conclusion to be made on the dynamics of soil processes and on the regularities in the interrrelations between soil and plants. Some of the results of the classical, prolonged and permanent sowings at the experimental fields of Broadbalkfield, Housfield, Barnfield, Park Grass, and Long-House are examined and the history of the organization of this experimental station is briefly described.

Card 1/1

- 6 -

SHUBIN, V.F. professor.

New textbook on agriculture ("Agriculture" by A.A. Verbin and others. Reviewed by V.F. Shubin). Zemledelie 5 no.4:88-91 Ap '57.
(MIRA 10:6)

1. Stalingradskiy sel'skokhozyaystvennyy institut.
(Agriculture--Study and teaching)
(Verbin, A.A.)

SHUBIN, V.F., doktor sel'skokhozyaystvennykh nauk.

Cultivation practices for high crop yields on virgin lands of the
Volga Valley. Zemledelie 5 no.10:36-41 O '57. (MIRA 10:11)
(Volga Valley--Tillage)

SHUBIN, V.F.

SHUBIN, V.F., prof.; ZOTIN, V.P., agronom

Collective farm of advanced cultivation practices. Zemledelie
5 no.12:63-70 D '57. (MIRA 11:1)

1. Kolkhoz "Iskra" Bogorodskogo rayona, Gor'kovskoy oblasti
(for Zotin).

(Bogorodsk District, Gorki Province--Collective farms)

SHUBIN, V.F., doktor sel'skokhozyaystvennykh nauk.

Crop rotation with a nonrotating field. Zemeledelie 6 no. 6:60-65
Je '58. (MIRA 11:6)

(Novo-Annenskiy District--Rotation of crops)

RADOV, A.S.; SHUBIN, G.A.; TOPILIN, Ye.K.; BEGUCHEV, P.P.; GUDKOV, A.N.;
VEDENYAPIN, G.Ye.; SHUBIN, V.F.; BASKHODOV, G.F.; KAZAKEVICH, L.I.;
IVASHCHENKO, P.S.; KONUROV, S.G.; AGAPOV, P.F.; IVANOV, A.F.

Grigorii Mikhailovich Tumin; 1876-1957. Pochvovedenie no.11:
103 N '58. (MIRA 11:12)

(Tumin, Grigorii Mikhailovich, 1876-1957)

SHUBIN, V.F.; SHAROVA, V.A.

Effect of prolonged inundations on wild and cultivated plants
in the Tsimlyansk Reservoir area. Bot.zhur. 43 no.12:1724-
1727 D '58. (MIRA 11:12)

1. Stalingradskiy sel'skokhozyaystvennyy institut.
(Tsimlyansk Reservoir region--Botany)

SHUBIN, Vasiliiy Fedorovich; KOVDA, V.A., otv.red.; IVANOV, V.V., red.
izd-va; YEGOROVA, N.P., tekhn.red.

[Reclamation of Chestnut soils of the Volga Valley] Osvoenie
kashtanovykh pochv Povolzh'ia. Moskva, Izd-vo Akad.nauk SSSR,
1959. 134 p. (MIRA 13:3)
(Volga Valley--Agriculture)

SHUBIN, V.F., prof.; ARTEMENKO, P.V., kand. sel'skokhoz. nauk

Time of sowing winter crops. Zemledelie 26 no.8:60-63 Ag '64.
(MIRA 17:11)

1. Volgogradskiy sel'skokhozyaystvennyy institut.

SHUBIN, V. F.

"Leprosy in Kara-Kalpak ASSR (Epidemiology and Prophylaxis)." Cand
Med Sci, Inst of Malaria, Medical Parasitology, and Helminthology, Moscow,
1953. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defened at USSR
Higher Educational INstitutions (12)
SO: Sum. No. 556 24 Jun 55

PEREVODCHIKOV, I.N., red.; SHUBIN, V.F., kand.med.nauk

[Leprosy; diagnosis and prophylaxis; a manual for physicians]
Raspoznavanie i profilaktika lepry; rukovodstvo dlia vrachei.
Moskva, Medgiz, 1957. 230 p. (MIRA 11:1)
(LEPROSY)

USSR/Microbiology - Microbes Pathogenic In Man and Animals.

F.

Abs Jour : Ref Zhur - Bioli, No 15, 1958, 67405

Author : Shubin, V.F.

Inst : Science Research Institute for the Study of Leprosy.

Title : The Advisability of Strict Isolation of Those Sick with Leprosy.

Orig Pub : Inform. byul. N.-i, in-t po izuch. lepry, 1957, No 2, 3-8.

Abstract : No abstract.

Card 1/1

NIKITINA, N.V.; STUDNITSIN, A.A.; SHUPIN, V.P.

Problems in leprosy control in the U.S.S.R. Vest.derm. i ven.
34 no.11:3-6 N '60. (MIRA 13:12)
(LEPROSY prev. & control)

SHUBIN, V.F. (Slavyansk, Donetskoy oblasti)

Endocardial fibroelastosis in adults. Vrach.delo no.9:136-137 S
'62. (MIRA 15:8)

(HEART--DISEASES)

SHUBIN, V.F.

Use of the proper indices in the evaluation of the functional
state of an organism. Vop. kur., fizioter. i lech. fiz. kul't.
no.6:521-526 '63. (MIRA 17:8)

1. Iz klinicheskogo Gurzufskogo sanatoriya Ministerstva oborony
SSSR.

COUNTRY USSR M
CIVILIAN Cultivated Plants. General Problems.

1957, 1958. Ref Zhur-Biologiya. 1957, 1958, 1959, 1960

1961, 1962.

NOT RIVER

Agrotechny for High Yields from the Virgin
land along the Volga (Povolzh'ye).

1961, 1962. Zemel'stvo, 1957, No 19, 36-41

Problems are discussed of tilling the virgin
plots on the Chestnut and Light Chestnut
Povolzh'ye soils, as well as of pre-planting
soil treatment, crop and variety selection.
Measures for controlling soil erosion and
agricultural pests.

SHUBIN, V., prof., doktor sel'skokhozyaystvennykh nauk

Clean fallows in the southeast. Nauka i pered. op. v sel'khoz.
8 no.9:16-18 S '58. (MIRA 11:10)

(Volga Valley--Fallowing)

SHUBIN, V. F.

N.M. Sibirtsev's role in establishing experimental fields
in the Nizhniy Novgorod Government. Pochvovedenie no.7:
14-19 '60. (MIRA 13:7)
(Nizhniy Novgorod Government--Field experiments)

SHCHERIN, V. F.

"Cultivation of Foot-and-Mouth Disease Virus". (A Paper). Sov. veterin., 1936, No. 6.

USSR/Medicine - Veterinary, New Drugs Sep 53

"Administration of Dorogov's Antiseptic Stimulant (ASD) for the Treatment of Strangles in Horses," Vet Physician V. F. Shubin

Veterinariya, Vol 30, No 9, pp 24-26

Intravenous injection of 20% soln of Dorogov's antiseptic stimulant (ASD)-f2 in distilled water at the rate of 20cc per day, to adult horses during early stages of strangles, produced recovery within 4-5 days. ASD-f2 solution administered during advanced stages of strangles resulted in disappearance

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of inflammation and abscess of the submaxillary lymphatic nodes followed by complete recovery within 6-7 days. If the abscess is lanced, better results can be obtained if ASD-f2 is administered intravenously simultaneously with local application of ASD-f3.

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SHUBIN, V. F.

USSR/Medicine - Veterinary

FD-479

Card 1/1 : Pub. 137 - 20/24

Author : Shubin, V. F. and Komarov, B. A., Veterinary Physicians (reviewers)

Title : Few comments on the book 'Laboratornyye metody issledovaniya v veterinarii' (Laboratory methods of research in veterinary science), Volume I

Periodical : Veterinariya, 7, 55-58, Jul 1954

Abstract : This volume (586 pp, published Moscow 1953, by Sel'khozgiz) has been enthusiastically received by veterinary specialists and laboratory workers. The need for an up-to-date text has long been felt, mainly because the old texts on the subject have become obsolete. This volume is an excellent practical text for identification of many infections in spite of the fact that quite a few errors, inaccuracies, and misprints have crept into some of its 17 chapters. Chapter 16 contains excellent information on the characteristics of ticks of the order of Acarina and on the features that distinguish arachnida from insects and other arthropoda. The text is well illustrated. The reviewers express regret that only 7,000 copies of the book were printed.

Institution :

Submitted :

L 47381-66 EWP(e)/EWT(m)/EWP(v)/T WW/WH
ACC NR: AP6020036 SOURCE CODE: UR/0413/66/000/014/0053/0053

INVENTOR: Ol'shanskiy, N. A.; Mordvintseva, A. V.; Shubin, F. V.

ORG: none

TITLE: Method of welding graphite with graphite. Class 21, No. 183851

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 53

TOPIC TAGS: graphite, graphite welding, filler

ABSTRACT: An Author Certificate has been issued for a method of welding graphite with graphite. To obtain a uniform weld, a graphite bar is used as the filler material. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 04Jun62/

Card 1/1 mjs

UDC: 621.791.752.042

SHUBIN, V.G.; RASHKOVSKIY, Ya.Z., redaktor; SLAVOROSOV, A.Kh., redaktor;
~~MADEINSKAYA, A.A.~~, tekhnicheskij redaktor

[Unified state system of coordinates for geodetic and mine surveys]
Edinaia gosudarstvennaya sistema koordinat dlia geodezicheskikh i
marksheiderskikh rabot. Moskva, Ugletekhizdat, 1954. 93 p.
(Geodesy) (Map-projection) (MLRA 8:6)

KOPTYUG, V.A.; SHUBIN, V.G.; REZVUKHIN, A.I.

Rapid migration of the methyl group in a heptamethylbenzenonium
ion. Izv. AN SSSR Ser. khim. no.1:201-202 '65.

(MIRA 18:2)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya
AN SSSR.

KOPTYUG, V.A.; REZVUKHIN, A.I.; SHUBIN, V.G.; KORCHAGINA, D.V.

Complexes of aromatic hydrocarbons with metal halides and hydrogen halides. Part 2: Proton magnetic resonance spectra of complexes of methylbenzenes with aluminum bromide and hydrogen bromide. Zhur. ob. khim. 35 no.5:864-870 My '65. (MIRA 18:6)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

KOPTYUG, V.A.; SHUBIN, V.G.; BAYEVA, I.K.; KORCHAGINA, D.V.; KOMAGOROV,
A.M.; REZVICHIN, A.I.

Complexes of aromatic hydrocarbons with metal halides and hydrogen
halides. Part 3: Infrared absorption spectra of complexes formed
by methylbenzene with aluminum bromide and hydrogen bromide.
Zhur. ob. khim. 35 no.6:1111-1116 Ja '65. (MIRA 18:6)

1. Novosibirskiy institut organicheskoy khimii.

KUZ'MINSKIY, Semen Pavlovich; SHUBIN, Vladimir Grigor'evich;
RODIONOV, L.Ye., otv.red.; SLAVOROSOV, A.Kh., red.izd-va;
LOMILINA, L.N., tekhn.red.

[Triangulation in mine surveying; principles of higher
geodesy] Rudnichnaya triangulyatsiya; osnovy vysshei geo-
dezii. Moskva, Ugletekhnizdat, 1959. 287 p. (MIRA 12:8)
(Triangulation) (Mine surveying)

KOPTYUG, V.A.; BAYEVA, I.K.; SHUBIN, V.G.; KORCHAGINA, D.V.;
KOMAGOROV, A.M.; REZVUKHIN, A.I.

Infrared spectra of protonated aromatic hydrocarbons. Izv.
AN.SSR.Ser.khim. no. 5:948 My '64. (MIRA 17:6)

1. Novosibirskiy institut organicheskoy khimi Sibirskogo
otdeleniya AN SSSR.

MESHK, A.F., inzh.; SHUBIN, V.I., inzh.

Improved gas burner for rotary kilns. Nauch. soob. NIITsmenta
no.11:1-6 '61. (HIRA 15:2)

(Gas burners)
(Kilns, Rotary)

BUDNIKOV, P.P.; SOKHATSKAYA, G.A.; SHUBIN, V.I.

Insulating the refractory lining in the clinkering zone of rotary
cement kilns. Ogneupory 29 no.11:508-513 '64.

(MIRA 18:1)

1. Gosudarstvennyy vsesoyuznyy nauchno-issledovatel'skiy institut
tsementnov promyshlennosti.

BUDNIKOV, P.P.; SHUBIN, V.

Investigation of the electrical conductivity of raw cement charges and their mixtures with basic refractories at high temperatures. Ukr.khim.zhur. 30 no.11:1216-1223 '64.

(MIRA 18:2)

SHUBIN, V.I.

Observations on the distribution of *Laccaria laccata* (FR.)
Cooke. Bot. zhur. 49 no.9:1305-1310 S '64. (MIRA 17:12)

1. Institut lesa Karel'skogo filiala AN SSSR, Petrozavodsk.

SHUBIN, V.I.

SHUBIN, V.I. "The Effect of Various Methods of Working soil in Microflora and Replantation." Leningrad Order of Lenin State University A.A. Zhdanov. Leningrad, 1956. (Dissertation for the Degree of Biological Science)

So: Knizhnaya Letopis', No. 18, 1956,

SHUBIN, V.I.

K-2

USSR/Forestry - Biology and Typology of the Forest.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10558

Author : Shubin, V.I.

Inst : Karelian Branch of the Academy of Sciences USSR

Title : On the Question of the Growth of Pine and Spruce on an Organic Substratum.

Orig Pub : Tr. Karel'sk. fil. Akad Nauk SSSR, 1957, No 7, 127-133

Abstract : A study was made of certain characteristics of the growth of self-seeded pines and spruces, both on tree-trunks and on undisturbed forest cover in the Karelian forests. Investigation of the self-seeding process on trunks in the forest indicated that in all cases micorise /mikoriza/ was present in the roots of both the pine and the spruce. When pine and spruce seeds were sown artificially on very decayed spruce trunks, only the micorised shoots and

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Card 1/2

POPOV, L.V.; SHUBIN, V.I.

Effect of forest litter on surface soil temperature in clearings of
the central taiga zone. Izv. Sib. otd. AN SSSR no.7:102-113 '58.
(MIRA 11:9)

1.Vostochno-Sibirskiy filial AN SSSR i Karel'skiy filial AN SSSR.
(Soil temperature) (Forest litter)

SHUBIN, V.I.; POPOV, L.V.

Studies concerning cultivation practices in young plantations
on clear-cut areas of southern Karelia. Trudy Kar.fil. AN
SSSR no.16:47-81 '59. (MIRA 13:4)
(Karelia--Reforestation)

POPOV, Leonid Vasil'yevich; SIN'KEVICH, Mikhail Stepanovich; ~~SHUBIN,~~
Vladimir Ivanovich; PANKRASHOV, A.P., red.; POD"EL'SKAYA, K.M.,
tekhn. red.

[Reforestation by seeding in cutover areas] Posev lesa na vyrub-
kakh. Petrozavodsk, Gos. izd-vo Karel'skoi ASSR, 1961. 108 p.
(MIRA 15:2)

(Reforestation)

SHUBIN, V.I.; KUZNETSOVA, A.I.

Special features of establishing forest plantations by surface
units in sod covered cutover areas. Trudy Kar. fil. AN SSSR
no.25:86-98 '61. (MIRA 14:9)

(Reforestation)

SHUBIN, V.I.; POPOV, L.V.

Using organic fertilizers in forest nurseries. Trudy Kar. fil.
AN SSSR no.25:09-108 '61 (MIRA 14:9)
(Forest nurseries--Fertilizers and manures)

SHUBIN, V.I.

Characteristics of the spreading of fusarium infection of pine
in cutover areas of Karelia. Trudy Kar.fil.AN SSSR no.34:141-
146 '62. (MIRA 16:1)

(Karelia--Fusarium)
(Karelia--Pine--Diseases and pests)